CLAIMS

1. A wind turbine gear unit comprising a low speed gear module and a plurality of high speed gear modules wherein said low speed gear module is operable simultaneously to transmit torque to each of said high speed gear modules.

2. A wind turbine gear unit according to claim 1, wherein at least one of said high speed gear modules is a multi-stage gear unit.

3. A wind turbine gear unit according to claim 1 or claim 2, wherein said low speed gear module is a multi-stage gear unit.

4. A wind turbine gear unit according to any one of the preceding claims, wherein the low speed gear module comprises a housing adapted to transfer rotor blade bending moment forces to a nacelle structure.

5. A wind turbine gear unit according to any of the preceding claims, wherein at least one of said high speed gear modules comprises a support housing which is selectively releasable from the housing of the low speed gear unit.

6. A wind turbine gear unit according to claim 4 or claim 5, wherein each high speed gear module housing provides support for bearings which rotatably support one or more rotatable components of that gear module.

7. A wind turbine gear unit according to any one of the preceding claims, wherein at least one high speed gear module has an electrical generator associated therewith.

8. A wind turbine gear unit according to claim 7, wherein the or each said electrical generator receives input torque via only one high speed gear module.

9. A wind turbine gear unit according to claim 7 or claim 8, wherein a said generator and associated high speed gear module form a sub-assembly which is selectively removable from the low speed gear module.

10. A wind turbine gear unit according to claim 9, wherein said generator comprises a shaft rotatably coupled to the high speed gear module via a spline connection.

11. A wind turbine gear unit according to any one of the preceding claims, wherein an intermediate stage gear module is provided between the low speed gear module and each high speed gear module.

12. A wind turbine gear unit according to any one of the preceding claims, wherein a spline connection is provided between the low speed gear module and each high speed gear module.

13. A wind turbine gear unit according to any one of the preceding claims and which is of an integrated type in which a component of the low speed gear module acts as part of a main rotor bearing.

14. A wind turbine gear unit according to claim 1, and substantially as hereinbefore described with reference to the accompanying drawings.

15. A wind turbine assembly comprising a wind turbine gear unit according to any one of the preceding claims and control means for selecting the number of generators operable to generate electricity.

16. A wind turbine assembly comprising a wind turbine gear unit and a plurality of electrical generators according to any one of claims 1 to 14, a wind powered rotor assembly coupled to a low speed input of the low speed gear module, and a nacelle support structure, wherein the low speed gear unit comprises a housing which transmits forces from the rotor assembly to the nacelle support structure.

17. A wind turbine assembly comprising a wind turbine gear unit according to claim 1 and substantially as hereinbefore described with reference to the accompanying drawings.